

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: July 24, 1998

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Removal Action Branch

Irmee Huhn

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Subject: Pyridium Mercury Disposal Site No. 1 (Pyridium 1)
Village of Harriman, Orange County, New York

POLREP NO. Ten (10)

II. BACKGROUND

Site No.: EV
Response Authority: CERCLA
NPL Status: Non-NPL
State Notification: NYSDOH notified
Action Memo Status: Signed 09/29/95, 9/25/97 and 3/6/98
Start Date: 1/9/95, 9/30/97, and 3/18/98
Demobilization Date: 4/5/95, 3/13/98, on-going
Completion Date: 4/7/95, 3/13/98, on-going

III. SITE INFORMATION

A. Incident Category: Illegal dump

B. Site Description

1. Site location

The Pyridium Mercury Disposal Site No. 1 (Pyridium 1) was a trailer park located at the intersection of State Route 17M and Harriman Heights Road in the Village of Harriman, Orange County, New York. Five mobile home trailers were located at the trailer park. All the trailers were occupied as residential dwellings.

A white clay-like material discovered at the trailer park, was used to fill low-lying areas of a wetland. This material was reportedly a waste product from the production of niacinamide by the Pyridium Corporation during the 1940's and 1950's. Nepera Inc. of Harriman, New York, currently occupies and operates the facility previously operated by the Pyridium Corporation.

B. Preliminary Assessment/Site Inspection Results

On October 20, 1994, the United States Environmental Protection Agency (EPA) collected a composite waste sample for waste characterization and mercury speciation. The sample was analyzed for Target Compound List (TCL) parameters, Target Analyte List (TAL) parameters and toxicity by the Toxicity Characteristic Leachate Procedure (TCLP).

Although the TCLP results are below regulatory limits, the TAL analytical results indicate the presence of mercury at an estimated concentration of 130 milligrams per kilogram (mg/kg). All the other compounds detected were below the New York State Department of Environmental Conservation (NYSDEC) recommended soil cleanup objectives.

Mercury speciation analytical results indicated that the sample contained no significant quantities of elemental mercury, mono-methyl mercury, or dimethyl mercury. When the sample was dissolved in an acid leach test, the mercury +2 ion leachate concentration was essentially the same as the total mercury concentration. Based on these results, the laboratory concluded that the sample was a chemical substrate contaminated with a mercuric or mercurous salt.

On November 17, 1994, the EPA Environmental Response Team (ERT) and the Response Engineering and Analytical Contractor (REAC) collected dust samples in each of the mobile homes at the trailer park. The analytical results of the dust sampling

indicated mercury concentrations ranging from 0.84 mg/kg to 26.8 mg/kg.

On November 28, 1994, Nepera, Inc. of Harriman, New York signed an Administrative Order on Consent (AOC) with EPA agreeing to fund relocation of the residents of the trailer park. Nepera has distributed relocation settlements to eligible residents. The amount of the settlement was based on federal relocation guidelines.

On January 9, 1995, verbal authorization was given by the EPA Director of the Emergency and Remedial Response Division to decontaminate, remove and dispose of the mobile homes, storage sheds and decks from the trailer park; disconnect water, sewer and electric utilities; remove heating oil and propane storage tanks; and fence the property and post warning signs. An Action Memorandum confirming verbal authorization was approved on February 27, 1996. For specific details refer to Polreps 1-3.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

ERRS completed the excavation and off-site disposal of contaminated soil. Backfilling of the main site area has been completed and equipment and personnel were demobilized on Friday, July 24, 1998.

2. Removal actions to date

ERRS removed large stones, debris and some sediments from the culvert box. The sediment was packed after approximately 4 years of accumulation (since the mercury waste was discovered at the property). Due to the condition of the sediments, the scope of work for the culvert pipe clean out was modified from utilizing a jet rod to a vactor. The jet rod would generate a large quantity of water and take an extraordinary amount of time. ERRS obtained bids for the new scope of work.

On July 14, the quantity of material approved for disposal into G.R.O.W.S landfill was reached. Beginning on July 14, the remaining loads of contaminated soil were transported to Tullytown Landfill, Tullytown, PA for off-site disposal.

During the week, the wetlands restoration plan was finalized. ERRS continued to load out contaminated soil. On July 14, one of the rain for rent tanks was deconned and ready for pick up on July 17. The excavator tracks, and pumps, hoses and supplies were decontaminated on July 16.

START photo and video documented the property between Marinas Pizzeria and the Monroe- Woodbury Fitness Center, and adjacent to the outfall of the culvert pipe prior to the mobilization of the Clean Venture crew for the removal of sediments and debris from the culvert pipe.

On July 20, ERRS installed silt fence on the outfall of culvert pipe by the fitness center and excavated and stockpiled the contaminated soil from the wetlands. Clean Venture began the pipe clean out utilizing a vactor truck starting on the south side of Route 17M at the culvert box, completing the sediment removal on July 21. There was substantially more sediment in the pipe than initially anticipated. Approximately 40 yards of material and water were collected during the pipe clean out. The water was pumped into the rain for rent tank and the solids/sludge was solidified and disposed of with the contaminated soil.

After the pipe was cleaned out, sediment in a 1' x 5' area was removed to about 1' depth down gradient of the culvert pipe to remove any contaminants which may have migrated from the site through surface water drainage. Following the removal of this sediment/soil, three post excavation samples were collected from the area to verify that the mercury concentration is below the clean up level.

On July 22, ERRS installed geotextile fabric and rip rap the wetlands area. The remaining three loads of contaminated soil were loaded out. The excavator bucket was deconned over the last load. Approximately 6,660 tons of mercury contaminated soils were sent for off-site disposal at the G.R.O.W.S. landfill in Morrisville, Pennsylvania and the Tullytown Landfill in Tullytown, PA.

On July 22, the last two tankers of water were loaded out and the rain for rent tank was deconned. Approximately 189,444 gallons of non-hazardous water generated during the excavation were shipped to Clean Venture in Camden, NJ and Clean Harbors of CT in Bristol, CT for off-site treatment.

On July 23, ERRS installed coconut matting and planted trees and shrubs along the bank of the wetlands. The dozer (7/22), scales(7/23) and rain for rent tank (7/23) were demobed. On

July 24, the seeding and strawing was completed in the area of excavation and wetlands. A total of 6,095 tons of backfill and 677 tons of topsoil were utilized to fill in the excavation. The office equipment, excavator, and storage trailer were demobilized from the site. Rettew Associates was on site on July 24 to survey in additional post excavation sample locations and elevations. The office trailer was scheduled for pick up on July 27.

EPA, ERRS and START demobilized the site on July 24, 1998.

3. Enforcement

The Office of Regional Council is reviewing available site documentation to identify PRPs and will evaluate the viability of legal claims stated by Nepera.

B. Next Steps

Restoration of the support area (once the office trailer and temporary utility pole is demobilized).

C. Key Issues

None.

V. COST INFORMATION

The following are estimated costs for the removal action as of July 24, 1998:

	PROJECT CEILING	PREVIOUS COSTS	COSTS TO DATE	FUNDS REMAINING
ERRS (ERCS) Costs	\$1,028,400	\$102,000	\$647,600	\$278,800
START (TAT) Costs	\$ 81,400	\$ 19,700	\$ 33,600	\$ 28,100
Contingency	\$ 209,500			\$209,500
EPA Cost	\$ 107,000	\$ 24,200	\$ 43,900	\$ 38,900
TOTAL PROJECT CEILING	\$1,426,300	\$145,900	\$725,100	\$555,300

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

VI. DISPOSITION OF WASTE

Waste stream	Medium	Quantity	Containment-Migration Control	Treatment	Disposal
Non-hazardous soil, wood, PPE and debris	solid	5,995 tons	dump trailers/triaxle dump trucks	landfill	G.R.O.W.S. Landfill, Morrisville, PA
Non-hazardous soil, wood, PPE and debris	solid	665 tons	dump trailers/triaxle dump trucks	landfill	Tullytown Resource Recovery Facility, Tullytown, PA
Non-hazardous, non-DOT water contaminated with mercury	water	147,714 gallons	tanker truck	waste water treatment	Cycle Chem/Clean Venture Inc. Camden, NJ
Non-hazardous, non-DOT water contaminated with mercury	water	41,730 gallons	tanker truck	waste water treatment	Clean Harbors of Connecticut, Bristol, CT